

medication information, exercise information), date of birth, or any other identifying or personal information.

**[0090]** The present disclosure recognizes that the use of such personal information data, in the present technology, can be used to the benefit of users. For example, the personal information data can be used to track a user's gaze to update displayed images and/or to perform other desired display operations. Accordingly, use of such personal information data enables users to view updated display images. Further, other uses for personal information data that benefit the user are also contemplated by the present disclosure. For instance, health and fitness data may be used to provide insights into a user's general wellness, or may be used as positive feedback to individuals using technology to pursue wellness goals.

**[0091]** The present disclosure contemplates that the entities responsible for the collection, analysis, disclosure, transfer, storage, or other use of such personal information data will comply with well-established privacy policies and/or privacy practices. In particular, such entities should implement and consistently use privacy policies and practices that are generally recognized as meeting or exceeding industry or governmental requirements for maintaining personal information data private and secure. Such policies should be easily accessible by users, and should be updated as the collection and/or use of data changes. Personal information from users should be collected for legitimate and reasonable uses of the entity and not shared or sold outside of those legitimate uses. Further, such collection/sharing should occur after receiving the informed consent of the users. Additionally, such entities should consider taking any needed steps for safeguarding and securing access to such personal information data and ensuring that others with access to the personal information data adhere to their privacy policies and procedures. Further, such entities can subject themselves to evaluation by third parties to certify their adherence to widely accepted privacy policies and practices. In addition, policies and practices should be adapted for the particular types of personal information data being collected and/or accessed and adapted to applicable laws and standards, including jurisdiction-specific considerations. For instance, in the US, collection of or access to certain health data may be governed by federal and/or state laws, such as the Health Insurance Portability and Accountability Act (HIPAA); whereas health data in other countries may be subject to other regulations and policies and should be handled accordingly. Hence different privacy practices should be maintained for different personal data types in each country.

**[0092]** Despite the foregoing, the present disclosure also contemplates embodiments in which users selectively block the use of, or access to, personal information data. That is, the present disclosure contemplates that hardware and/or software elements can be provided to prevent or block access to such personal information data. For example, in the case of gaze tracking, the present technology can be configured to allow users to select to "opt in" or "opt out" of participation in the collection of personal information data during registration for services or anytime thereafter. In another example, users can select not to perform gaze tracking or other operations that gather personal information data. In yet another example, users can select to limit the length of time gaze tracking is performed. In addition to providing "opt in" and "opt out" options, the present dis-

closure contemplates providing notifications relating to the access or use of personal information. For instance, a user may be notified upon downloading an app that their personal information data will be accessed and then reminded again just before personal information data is accessed by the app.

**[0093]** Moreover, it is the intent of the present disclosure that personal information data should be managed and handled in a way to minimize risks of unintentional or unauthorized access or use. Risk can be minimized by limiting the collection of data and deleting data once it is no longer needed. In addition, and when applicable, including in certain health related applications, data de-identification can be used to protect a user's privacy. De-identification may be facilitated, when appropriate, by removing specific identifiers (e.g., date of birth, etc.), controlling the amount or specificity of data stored (e.g., collecting location data a city level rather than at an address level), controlling how data is stored (e.g., aggregating data across users), and/or other methods.

**[0094]** Therefore, although the present disclosure broadly covers use of personal information data to implement one or more various disclosed embodiments, the present disclosure also contemplates that the various embodiments can also be implemented without the need for accessing such personal information data. That is, the various embodiments of the present technology are not rendered inoperable due to the lack of all or a portion of such personal information data. For example, display images based on non-personal information data or a bare minimum amount of personal information, such as the content being requested by the device associated with a user, other non-personal information available to the display system, or publicly available information.

**[0095]** The foregoing is merely illustrative and various modifications can be made to the described embodiments. The foregoing embodiments may be implemented individually or in any combination.

What is claimed is:

1. An electronic device comprising:

a display configured to emit image light;

a waveguide;

an input coupler configured to couple the image light emitted by the display into the waveguide;

a first beam splitter layer embedded in the waveguide; and

a second beam splitter layer embedded in the waveguide, wherein the second beam splitter layer at least partially overlaps the first beam splitter layer, wherein the first beam splitter layer is configured to transmit a first portion of the image light to the second beam splitter layer and to reflect a second portion of the image light, and wherein the second beam splitter layer is configured to partially reflect the first portion of the image light transmitted by the first beam splitter layer.

2. The electronic device defined in claim 1, wherein the waveguide comprises first and second transparent substrate layers, the first beam splitter layer is formed on the first transparent substrate layer, the second beam splitter layer is formed on the second transparent substrate layer, the second transparent substrate layer is mounted to the first transparent substrate layer, and the second transparent substrate layer is interposed between the first and second beam splitter layers.

3. The electronic device defined in claim 2, wherein the waveguide further comprises a third transparent substrate layer mounted to the second transparent substrate layer,